

WHAT IS CLAIMED IS:

- 1 1. An antenna apparatus, comprising:
2 an antenna element, having directivity in a vertex direction;
3 an antenna case, containing the antenna element;
4 an antenna base, coupled to the antenna case, and attached
5 onto an installation face; and
6 an angle regulator, adjusting a relative angle between the
7 antenna case and the antenna base.

- 1 2. The antenna apparatus as set forth in claim 1, further comprising
2 a driving unit, driving the angle regulator so as to mechanically adjust
3 the relative angle between the antenna case and the antenna base.

- 1 3. The antenna apparatus as set forth in claim 2, further comprising
2 a detector, detecting a condition of radio-wave received by the antenna
3 element; and
4 a controller, controlling the driving unit based on the
5 condition of the radio-wave detected by the detector.

- 1 4. The antenna apparatus as set forth in claim 1, wherein the
2 angle regulator includes a plunger, a receiving portion having a
3 plurality of depressions for latching the plunger, and a resilient
4 member urging the plunger to the receiving portion.

1 5. The antenna apparatus as set forth in claim 1, wherein a hook
2 hole is formed in a base face of the antenna base.

1 6. The antenna apparatus as set forth in claim 5, wherein the
2 hook hole has a large-diameter hole portion and narrow slit portions
3 which formed on both sides of the large-diameter portion.

1 7. The antenna apparatus as set forth in claim 6, wherein the
2 hook hole has a plurality of hook holes; and
3 wherein the hook holes are formed in four places corresponding
4 to four corners of the base face which is attached onto the installation
5 face.

1 8. The antenna apparatus as set forth in claim 1, wherein a cable
2 hole is formed in a base face of the antenna base so that a cable is
3 drawn out from the cable hole toward an upper side or a lower side
4 of the antenna base.

1 9. The antenna apparatus as set forth in claim 8, wherein a cable
2 drawing-out groove is formed in the base face of the antenna base so
3 as to extend to the upper side or the lower side of the antenna base;
4 and

5 wherein a cable latch portion is formed in the base face of
6 the antenna base so as to latch the cable which is drawn out along
7 the groove.

1 10. The antenna apparatus as set forth in claim 1 wherein the
2 installation face is formed on an interior of a vehicle.

1 11. The antenna apparatus as set forth in claim 1 wherein an elastic
2 slip stopper is provided on a base face of the antenna base.